

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - The base 10 number system is based on groups of 10.</b>				
<b>1a. Essential Question - What strategies can be used to read and compare large numbers?</b>				
NO.1.3.2	Use the place-value structure of the base ten number system and be able to represent and compare whole numbers including thousands, (using models, illustrations, symbols, expanded notation and problem solving) (Ex. 2,308 ____ 2,038)	<ul style="list-style-type: none"> <li>*use manipulatives to show and to compare whole numbers including thousands</li> <li>*illustrate to show and to compare whole numbers including thousands</li> <li>*use symbols to show and to compare whole numbers including thousands</li> <li>*use expanded notation to write and to compare whole numbers including thousands</li> <li>*solve real-world problems by applying knowledge of showing and comparing whole numbers including thousands</li> </ul>	compare represent place value thousands expanded notation models base ten symbols comma	HC 22-23, 24-27, 28-29, 32-33
NO.1.3.3	Use mathematical language and symbols to compare and order 4-digit numbers with and without appropriate technology (<, >, =)	<ul style="list-style-type: none"> <li>*identify the ones place in the Thousands Period</li> <li>*identify the ones, tens, and hundreds place in the Ones Period</li> <li>*introduce the comma in a number</li> <li>*identify the value of the digits to compare and order 4-digit numbers</li> <li>*use &lt;, &gt;, = when comparing two 4-digit numbers</li> <li>*sequence multiple 4-digit numbers from greatest to least or least to greatest</li> </ul>	less than (<) greater than (>) equal to (=) order compare digit value Thousands Period Ones Period ones tens hundreds thousands	HC 42-45

Module 1 Start: 8/19/2010 Teaching Days: 14 Test: 9/9/2010 Remediation Days: 2 End: 9/13/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>2. Enduring Understanding - Place value patterns are repeated in large numbers.</b>				
<b>2a. Essential Question - How are place value patterns repeated in large numbers?</b>				
NO.1.3.1	Recognize equivalent representations for the same whole number and generate them by composing and decomposing numbers (Ex. $352 = 300 + 50 + 2$ ; $300 + 25 + 25 + 2$ ; $150 + 150 + 50 + 2$ , etc.)	*decompose (break apart) whole numbers into smaller units *compose (put together) a set of numbers to form a whole number *show whole numbers in expanded form and standard form, and recognize that they are equivalent	equivalent whole number place value digit expanded form standard form ones tens hundreds thousands compose decompose	HC 28-29
A.4.3.1	Count forward and backward when given a number less than or equal to 1000 (Ex. ____, 399, ____, 401)	*count forward from any given number (up to 1000) in written or oral form *count backward from any given number to (up to and including 1000) in written or oral form	forward backward	HC 30-31
<b>3. Enduring Understanding - Multiplication and division can be accomplished through addition and subtraction of partial products.</b>				
<b>3a. Essential Question - How can multiples be used to solve problems?</b>				
A.4.3.3	Identify a number that is more or less than any whole number up to 1000 using multiples of ten and/or 100 (Ex. 100 less than 587 is 487; 10 more than 196 is 206)	*skip count by multiples of ten from any number forward and backward Ex. 23, 33, 43, 53, etc. *skip count by multiples of one hundred from any number forward and backward Ex. 414, 314, 214, 114	more less multiple whole number	HC 30-31
<b>4. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>4a. Essential Question - What is the relationship among factors, products, and quotients?</b>				
NO.2.3.2a	Apply number theory: determine if a 3-digit number is even or odd	*identify the digit in the one's place *determine if the three-digit number is even or odd based on the digit in the one's place (no matter the other digits) *identify the ones place patterns for even numbers (0,2,4,6,8) *identify the ones place patterns for odd numbers (1,3,5,7,9)	even odd ones place	HC 20-21

Module 1 Start: 8/19/2010 Teaching Days: 14 Test: 9/9/2010 Remediation Days: 2 End: 9/13/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - Organization of information shows relationships.</b>				
<b>5a. Essential Question - What are some ways to organize data?</b>				
DAP.14.3.1d	Collect, organize, display and describe simple data using pictographs	*describe a pictograph *collect and sort data *decide how to display data *organize and display data using a pictograph *label and title the pictograph *add a key to the pictograph *describe data in the pictograph	survey collect data pictograph key organize display describe	HC 322-323, 198-199
DAP.14.3.1e	Collect, organize, display and describe simple data using bar graphs	*describe a bar graph (vertical and horizontal) *collect and sort data *decide how to display data *organize and display data using a bar graph (vertical and horizontal) *label and title the bar graph (also add vertical and horizontal labels) *describe data in the bar graph	survey collect data bar graph (vertical and horizontal) organize display describe	HC 324-325, 326-327
8 SLEs		End of Module 1		

## ALIGNMENT NOTES

<b>Calculators</b>
No calculators will be used on Module 1 assessment.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Perimeter is a one-dimensional measure (perimeter surrounds); area is a two-dimensional measure (area covers); volume is a three-dimensional measure (volume fills in).</b>				
<b>1a. Essential Question - What strategies can be used to find area, perimeter, and volume of a shape or region?</b>				
G.8.3.2	Identify regular polygons with at least 4 sides (square, pentagon, hexagon and octagon)	*identify a polygon *know a regular polygon has equal sides and equal angles *identify square, regular pentagon, regular hexagon, and regular octagon	regular polygon square regular pentagon regular hexagon regular octagon properties	HC 390-391, 396-399 / V 8.1, 8.2
<b>2. Enduring Understanding - Changing the position of an object does not affect its attributes.</b>				
<b>2a. Essential Question - What strategies can be used to check for symmetry?</b>				
G.9.3.1	Draw one or more lines of symmetry in a polygon	*apply congruency and symmetry *identify one of more lines of symmetry in a polygon *draw one or more lines of symmetry in a polygon *discover how many lines of symmetry can be drawn in a polygon	congruent symmetry lines of symmetry polygon	HC 410-411 / V 8.15, 8.16
<b>3. Enduring Understanding - Objects can be described and compared using geometric attributes.</b>				
<b>3a. Essential Question - How are points, lines, line segments, and rays related?</b>				
G.8.3.3	Identify and draw line, line segment and ray using appropriate labels	*identify a line, a line segment, and a ray *label a line, a line segment, and a ray *compare/contrast a line, a line segment, and a ray *draw a line, a line segment, and a ray (labeling each correctly)	line line segment ray label	HC 384-387
G.8.3.4	Identify and draw intersecting and parallel lines	*identify intersecting lines and parallel lines *draw intersecting lines and parallel lines	intersecting lines parallel lines	HC 388-389 / V 8.3
<b>4. Enduring Understanding - A transformation is a specific movement of an object.</b>				
<b>4a. Essential Question - What are translations, rotations, and reflections?</b>				
G.9.3.2	Describe the motion (transformation) of a two-dimensional figure as a flip (reflection), slide (translation) or turn (rotation)	*recognize the motion of a figure *model and explain flip, slide and turn with objects *use flip, slide or turn to describe how a figure was moved	slide (translation) flip (reflection) turn (rotation) motion (transformation)	HC 414-415 / V 8.14, 8.23 Supplement terms

Module 2 Start: 9/14/2010 Teaching Days: 12 Test: 9/30/2010 Remediation Days: 2 End: 10/4/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - The choice of measurement tools depends on the measurable attribute and the degree of precision required.</b>				
<b>5a. Essential Question - What determines the choice of a measurement tool?</b>				
M.13.3.7	Read temperatures on Fahrenheit and Celsius scales in intervals of two and five	*recognize whether it is a Fahrenheit or Celsius thermometer by looking at the label *count by 2's and 5's *read temperature on Fahrenheit and Celsius scales	temperature Fahrenheit Celsius degree	HC 368-369
<b>6. Enduring Understanding - Both common and decimal fractions can represent fractional parts.</b>				
<b>6a. Essential Question - How are numbers that represent fractional parts compared?</b>				
NO.1.3.4	Represent fractions (halves, thirds, fourths, sixths and eighths) using words, numerals and physical models. (Ex. identify and illustrate parts of a whole and parts of sets of objects; recognize that a fractional part of a rectangle does not have to be shaded with contiguous parts)	*use objects to model halves, thirds, fourths, sixths, and eighths as they relate to parts of a set or parts of a whole *understand the meaning of the numbers in a fraction *write the fraction in numerals/words *recognize that a fractional part of a model does not have to be shaded in contiguous (touching) parts	fraction halves thirds fourths sixths eighths numerator denominator contiguous (touching) parts whole set	HC 516-519, 520-521 / V 5.3
NO.1.3.5	Utilize models to recognize that the size of the whole determines the size of the fraction depending on the original quantity	*use different size models to represent a whole to show, for example, that 1/2 of a miniature Hershey bar is less than 1/2 of a jumbo Hershey bar or that there are more M&Ms in 1/4 of a regular sized bag of M&Ms than in 1/4 of a miniature sized bag of M&Ms	quantity whole set fractions size	
8 SLEs				End of Module 2

## ALIGNMENT NOTES

Additional Information	
M 12.3.3 Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer will be taught, but not assessed.	
Calculators	
No calculators will be used on Module 2 assessment.	

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - The base 10 number system is based on groups of 10.</b>				
<b>1a. Essential Question - What strategies can be used to read and compare large numbers?</b>				
NO.1.3.2	Use the place-value structure of the base ten number system and be able to represent and compare whole numbers including thousands, (using models, illustrations, symbols, expanded notation and problem solving) (Ex. 2,308 ____ 2,038)	*use manipulatives to show and to compare whole numbers including thousands *illustrate to show and to compare whole numbers including thousands *use symbols to show and to compare whole numbers including thousands *use expanded notation to write and to compare whole numbers including thousands *solve real-world problems by applying knowledge of showing and comparing whole numbers including thousands	compare represent place value thousands expanded notation models base ten symbols comma	Review from Module 1
<b>2. Enduring Understanding - Flexible methods of computation involve grouping numbers in a variety of ways.</b>				
<b>2a. Essential Question - What strategies can be used for finding sums and differences?</b>				
NO.3.3.1a	Develop, with and without appropriate technology, computational fluency, in multi-digit addition through 999 using contextual problems: develop strategies for adding numbers and estimate sums in appropriate situations.	*use addition strategies to estimate and solve contextual problems through 999 (strategies may include mental math, composing and decomposing numbers, rounding, estimation, compatible numbers, partial-sums) *use technology to solve contextual problems using addition	sum estimation rounding multi-digit addends compatible numbers mental math composing numbers decomposing numbers	HC 8-9, 70-73, 120-121, 580-583
NO.3.3.1b	Develop, with and without appropriate technology, computational fluency, in multi-digit subtraction through 999 using contextual problems: develop strategies for subtracting numbers and estimate differences in appropriate situations.	*use subtraction strategies to estimate and solve contextual problems through 999 (strategies may include mental math, composing and decomposing numbers, compatible numbers, compensatory numbers, rounding, counting up, partial differences, same-change rule) *use technology to solve contextual problems using subtraction	difference estimation rounding multi-digit mental math composing numbers decomposing numbers	HC 10-11, 90-91, 92-95, 96-101, 120-121, 580-583

Module 3 Start: 10/5/2010 Teaching Days: 15 Test: 10/27/2010 Remediation Days: 2 End: 10/29/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
NO.3.3.1c	Develop, with and without appropriate technology, computational fluency, in multi-digit addition and subtraction through 999 using contextual problems: relationships between operations	<ul style="list-style-type: none"> <li>*understand that addition and subtraction are inverse (opposite) operations</li> <li>*understand the concept of fact families</li> <li>*determine missing addends</li> <li>*use addition to check subtraction</li> <li>*use technology to solve contextual problems using addition and subtraction</li> </ul>	inverse operations sum difference	HC 2-3, 4-5, 6-7
<b>3. Enduring Understanding - Elapsed time is the measure of the duration of an event.</b>				
<b>3a. Essential Question - What is the difference between length of time and time of day?</b>				
M.13.3.2	Tell time to the nearest one-minute interval	<ul style="list-style-type: none"> <li>*identify that each mark on a clock represents one minute according to the minute hand</li> <li>*count by ones and fives to determine time</li> <li>*identify that there are sixty minutes in one hour</li> <li>*read a clock to the nearest one-minute interval</li> </ul>	minute hand hour hand	HC 128-131
<b>4. Enduring Understanding - Organization of information shows relationships.</b>				
<b>4a. Essential Question - What are some ways to organize data?</b>				
DAP.14.3.1b	Collect, organize, display and describe simple data using frequency tables	<ul style="list-style-type: none"> <li>*describe a frequency table</li> <li>*collect and sort data</li> <li>*decide how to display data</li> <li>*organize and display data using a frequency table</li> <li>*label and title the frequency table</li> <li>*describe data in the frequency table</li> </ul>	survey collect data frequency table organize display describe tally mark	HC 302-303, 304-305
DAP.14.3.1c	Collect, organize, display and describe simple data using line plots	<ul style="list-style-type: none"> <li>*describe a line plot</li> <li>*collect and sort data</li> <li>*decide how to display data</li> <li>*organize and display data using a line plot</li> <li>*label and title the line plot</li> <li>*describe data in the line plot</li> </ul>	survey collect data line plot organize display describe	HC 310-313

Module 3 Start: 10/5/2010 Teaching Days: 15 Test: 10/27/2010 Remediation Days: 2 End: 10/29/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - Currency amounts can be grouped and exchanged to solve problems.</b>				
<b>5a. Essential Question - Why is it important to represent currency amounts in different ways?</b>				
M.13.3.6a	Apply money concepts in contextual situations up to \$10 (Ex. determine change with the least amount of currency)	*recognize the relationship between cost and change *determine change with the least amount of currency *develop strategies for solving money problems in context	decimal point dollar sign cost change currency least	HC 118-119
M.13.3.6b	Apply money concepts in contextual situations up to \$10 (Ex. compare money)	*determine the value of sets of money *compare values of money up to \$10 *develop strategies for solving money problems in context	decimal point dollar sign currency compare value	HC 116-117
9 SLEs				End of Module 3

## ALIGNMENT NOTES

Additional Information
M 13.3.5 Determine the value of money up to \$10 will be taught, but not assessed.
Calculators
Calculators will be used on Module 3 test.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>1a. Essential Question - What is the relationship among factors, products, and quotients?</b>				
NO.2.3.1a	Develop an understanding of the commutative property of multiplication using objects	*Use objects to demonstrate the commutative property of multiplication Ex. $2 \times 3 = 3 \times 2$ (2 groups of 3 marbles is equal to 3 groups of 2 marbles) *use arrays and groups to show the commutative property of multiplication	commutative property of multiplication	HC 162-163, 164-165 / V 2.22
NO.2.3.1b	Develop an understanding of the identity property of multiplication using objects	*Use objects to illustrate the identity property of multiplication Ex. $7 \times 1 = 7$ *make arrays and groups to show the identity property of multiplication	identity property of multiplication	HC 176-179, 220-221
NO.2.3.2b	Apply number theory: use the terms multiple, factor, and product in an appropriate context Ex. Since $3 \times 4 = 12$ , 3 and 4 are factors; 12 is the product 3, 6, 9, 12 are multiples of 3 4, 8, 12, 16 are multiples of 4	*identify multiples of a number *relate multiples to skip-counting *identify factors of a number *identify factors in an equation *identify the product in an equation	multiple factor product equation	HC 176-177, 178-179
<b>1b. Essential Question - How can models for multiplication be used to divide?</b>				
NO.2.3.4b	Model, represent, and explain grouping / partitioning division problems as partitive division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Gene has 4 tomato plants. There are the same number of tomatoes on each plant. All together, there are 20 tomatoes. How many tomatoes are there on each tomato plant?	*identify the number of groups/parts and the total number of items. Write an equation to find the number of items in each group. Examples: $20 \div 4 = n$ (5 tomatoes are on each plant.) $20 \div 4 = 5$ tomatoes	division group/part total items equation	Classification of Word Problems Chart

Module 4 Start: 11/1/2010 Teaching Days: 20 Test: 12/3/2010 Remediation Days: 2 End: 12/7/2010

Student Learning Expectation	Task Analysis	Vocabulary	Materials / References
NO.2.3.4c	Model, represent, and explain grouping / partitioning division problems as measurement division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Gene has some tomato plants. There are 6 tomatoes on each plant. All together there are 24 tomatoes. How many tomato plants does Gene have?	*identify the number of items in each group and the total number of items. Write an equation to find the number of groups/parts. Examples $24 \div 6 = n$ (Gene has 4 tomato plants.) $24 \div 6 = 4$ tomato plants	division group/part total items equation  Classification of Word Problems Chart
A.4.3.2	Relate skip-counting patterns to multiplication	*practice skip counting patterns starting at any given number (not always a multiple of the number being used to skip count.) *relate skip counting to repeated addition *use skip counting as a strategy for multiplication	multiples skip counting patterns repeated addition  HC 182-185 / V 2.25

**2. Enduring Understanding - Symbolic notation is used to represent mathematical relationships.**

**2a. Essential Question - How are symbols used to represent mathematical relationships including operations, equality, and inequality?**

NO.2.3.3a	Use conventional mathematical symbols to write equations for contextual problems involving multiplication. (Grouping / Partitioning – example: Gene has 4 tomato plants. There are 6 tomatoes on each plant. How many tomatoes are there all together?)	*identify the number of groups in the story problem *identify the number of items in each group *write an equation that represents the multiplication story. Examples: $4 \times 6 = n$ (There are 24 tomatoes in all.) $4 \times 6 = 24$ tomatoes	symbols equations group item or unit contextual problems multiplication  Classification of Word Problems Chart
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**3. Enduring Understanding - Perimeter is a one-dimensional measure (perimeter surrounds); area is a two-dimensional measure (area covers); volume is a three-dimensional measure (volume fills in).**

**3a. Essential Question - What strategies can be used to find area, perimeter, and volume of a shape or region?**

M.13.3.11	Find the area of any region counting squares and half-squares	*identify that area is the measurement of the interior of a figure *contrast square units with units *recognize that each square represents one square unit *combine half-squares into whole square (when possible) *count the squares and half-square to find the area of any region	area square half-square square unit grid  HC 450-451, 448-449 / V 9.3, 9.4, 9.5, 9.6, 9.8
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Module 4 Start: 11/1/2010 Teaching Days: 20 Test: 12/3/2010 Remediation Days: 2 End: 12/7/2010

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>4. Enduring Understanding - Ordered pairs show an exact location on a coordinate plane.</b>				
<b>4a. Essential Question - How is the location of a point on a grid described?</b>				
G.10.3.1a	Locate and identify points on a coordinate grid (quadrant one only.) Ex. What point is located at (3,1) on the coordinate grid?	Note: Use quadrant one only. Quadrant one is the top right of the four sections of a coordinate grid that are separated by the x and y axes. *demonstrate how to locate a point on a grid by first moving horizontally on the grid then vertically on the grid *name a point on a grid	point coordinate grid ordered pair horizontal vertical	HC 328-329 / V 8.20
G.10.3.1b	Name the ordered pair (quadrant 1 only) on a coordinate grid. Ex. Name the ordered pair for point B.	*find a point on the coordinate grid and identify its ordered pair	point coordinate grid ordered pair horizontal vertical	HC 328-329 / V 8.20
G.10.3.1c	Use common language and geometric vocabulary (horizontal and vertical) when locating and identifying points on a coordinate grid and naming the ordered pair (quadrant one only)	*demonstrate how to locate a point on a grid by moving horizontally on the grid then vertically on the grid (which direction to move first) *name a point on a grid *identify a point on a grid *Ex. · Starting at 0 move 2 spaces horizontally and 3 spaces vertically · Starting at 0 move 2 spaces to the right and 3 spaces up	point coordinate grid ordered pair horizontal vertical column row	HC 328-329 Supplement Terms Another Ex. Starting at (2,3) move 4 spaces horizontally and 3 spaces vertically
11 SLEs				End of Module 4

## ALIGNMENT NOTES

### Additional information for Module 4.

NO 3.3.2a Develop, with and without appropriate technology, fluency with basic number combinations for multiplication facts (10 x 10). will be taught, but not assessed.

M 13.3.9b Estimate and measure area using appropriate customary units: square inches (use models) will be taught, but not assessed.

### Calculators

No calculators will be used on Module 4 assessment.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Elapsed time is the measure of the duration of an event.</b>				
<b>1a. Essential Question - What is the difference between length of time and time of day?</b>				
M.13.3.1	Use a calendar to determine elapsed time from month to month	*read a calendar from month to month (forward and backward) *develop the strategy that every time you move up or down a square you move a week or seven days *determine elapsed time by reading a calendar	week month year calendar elapsed time	HC 128-131
M.13.3.3	Express time to the half hour and quarter hour using the terms half-past, quarter after, quarter until	*define quarter hour as 1/4 hour *define quarter hour as 15 minutes *identify that four quarters equals one whole (as related to fractions) *define half hour as 1/2 hour *define half hour as 30 minutes *identify that two halves equals one whole (as related to fractions) *use quarter after, quarter until, and half-past when expressing time	quarter hour half hour half-past quarter until quarter after quarter of quarter to	HC 128-131 / V 9.11
<b>2. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>2a. Essential Question - What is the relationship among factors, products, and quotients?</b>				
NO.2.3.2c	Apply number theory: use the term quotient in an appropriate context Ex. $12 \div 4 = 3$ , 3 is the quotient	*understand the meaning of quotient *identify the quotient in an equation	quotient equation	HC 242-245

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>2b. Essential Question - How can models for multiplication be used to divide?</b>				
NO.2.3.4a	Model, represent, and explain division using rectangular arrays (area model) as measurement and partitive division. Translate contextual situations involving division into conventional mathematical symbols.	<p>*use rectangular arrays to show division</p> <p>Partitive Division Example There are 24 squares. There are 4 rows of squares. How many squares are in each row? (The number of groups/rows is given, the total number of squares is given.)  <math>24 \div 4 = n</math> (6 squares are in each row.)  <math>24 \div 4 = 6</math> squares</p> <p>Measurement Division Example There are 24 squares. If 6 squares are in each row, how many rows of squares are there? (The the total number of squares is given. The number of squares in each group/row is given.)  <math>24 \div 6 = n</math> (There are 4 rows of squares.)  <math>24 \div 6 = 4</math> rows</p>	rectangular array row group column division equation	Classification of Word Problems Chart / HC 242-245 / V 2.22, 2.23
NO.2.3.4d	Model, represent, and explain rate division problems as partitive division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Ellen walked 15 miles. It took her 5 hours. If she walked the same speed the whole way, how far did she walk in one hour?	<p>(Note: Students often use the same strategies for rate problems as they use for equal group problems.)</p> <p>*identify the unit of rate (ex. miles per hour)            *identify the number of groups/parts and the total number of items. Write an equation to find the number of items in each group.            Examples  <math>15 \div 5 = n</math> (She walked 3 miles in one hour.)  <math>15 \div 5 = 3</math> miles</p>	division rate per equation	Classification of Word Problems Chart

Module 5 Start: 12/8/2010 Teaching Days: 17 Test: 1/14/2011 Remediation Days: 2 End: 1/19/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
NO.2.3.4e	Model, represent, and explain rate division problems as measurement division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Ellen walks 3 miles an hour. How many hours will it take her to walk 15 miles?	(Note: Students often use the same strategies for rate problems as they use for equal group problems.) *identify the unit of rate (ex. miles per hour) *identify the number of items in each group and the total number of items. Write an equation to find the number of groups/parts. Examples: $15 \div 3 = n$ (It will take her 5 hours to walk 15 miles.) $15 \div 3 = 5$ hours	division rate per equation	Classification of Word Problems Chart
<b>3. Enduring Understanding - Symbolic notation is used to represent mathematical relationships.</b>				
<b>3a. Essential Question - How are symbols used to represent mathematical relationships including operations, equality, and inequality?</b>				
NO.2.3.3b	Use conventional mathematical symbols to write equations for contextual problems involving multiplication. (Rate - example: Ellen walks 3 miles an hour. How many miles does she walk in 5 hours?)	(Note: Students often use the same strategies for rate problems as they use for equal group problems.) *identify the unit of rate in the story problem *identify the number of groups in the story problem *identify the number of items (rate) in each group *write an equation that represents the multiplication story. Examples $5 \times 3 = n$ (Ellen can walk 15 miles in 5 hours.) $5 \times 3 = 15$ miles	rate symbols equations contextual problems multiplication	Classification of Word Problems Chart
A.5.3.2	Express mathematical relationships using equalities and inequalities ( $>$ , $<$ , $=$ , and the symbol for is not equal to) Ex. $4 \times 9$ ____ $36 - 3$	*explain and understand the symbols ( $<$ , $>$ , $=$ , and the symbol for is not equal to) *evaluate expressions on both sides *use symbols to compare the expressions *decide whether an equality or inequality is true or false *supply numbers that make given equalities or inequalities true	greater than less than equal to not equal to true false expression equality inequality	HC 80-81, AR 6-7 / V 10.12, 10.15, 10.16

Module 5 Start: 12/8/2010 Teaching Days: 17 Test: 1/14/2011 Remediation Days: 2 End: 1/19/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>4. Enduring Understanding - Organization of information shows relationships.</b>				
<b>4a. Essential Question - How can the elements of a graph help people to understand and to interpret the data?</b>				
DAP.16.3.1	Make predictions for a given set of data	*analyze data *make a prediction based on the data, prior knowledge, patterns, and sequence (What do you think will happen now that you have looked at the data?)	predict data	
<b>4b. Essential Question - How does changing the scale affect how data is communicated?</b>				
DAP.15.3.1	Read and interpret pictographs and bar graphs in which symbols or intervals are greater than one	*identify and count symbols on a pictograph in intervals greater than one (read the key to identify the interval to use) *identify that a half symbol represents half of the value on a pictograph *read the interval on the bar graph in order to know what to count by (2's, 5's, 10's, etc.) *understand what to do if the bar stops between an interval on a bar graph *read and interpret pictographs and bar graphs in which symbols or intervals are greater than one	key (on a pictograph) symbol vertical label horizontal label pictograph bar graph	HC 198-199, 322-323, 324-325, 326-327
<b>5. Enduring Understanding - Standard units provide common language for communicating measurements.</b>				
<b>5a. Essential Question - How are units of measure related?</b>				
M.13.3.4a	Determine elapsed time in contextual situations to five-minute intervals End time unknown: Lunch began at 10:45 and lasted 25 minutes. When was lunch over?	*identify the start time. *identify the elapsed time. *determine the ending time *develop strategies for finding various unknowns [counting by 5s, counting to the next hour, adding an hour(s)]	elapsed time starting time ending time analog clock digital clock	HC 134-135, 136-137
M.13.3.4b	Determine elapsed time in contextual situations to five-minute intervals Elapsed hours unknown: John went to Tim's house at 3:15. He left at 4:20. How long did he stay?	*identify the start time *identify the end time *determine the amount of time that has passed between the starting time and the ending *develop strategies for finding various unknowns [counting by 5s, counting to the next hour, adding an hour(s)]	elapsed time starting time ending time analog clock digital clock	HC 134-135, 136-137
12 SLEs		End of Module 5		

## ALIGNMENT NOTES

### Additional information for Module 5

NO 3.3.2b Develop, with and without appropriate technology, fluency with basic number combinations for division facts will be taught, but not assessed.

M 12.3.1 Determine the number of days in a month, days in a year and identify the number of weeks in a year, will be taught, but not assessed.

M 12.3.2a Recognize that 60 minutes equal 1 hour, will be taught, but not assessed.

M 12.3.2b Recognize that a day is divided into AM and PM will be taught, but not assessed.

DAP 15.3.2 Match a set of data with a graphical representation of the data will be taught, but not assessed.

### Calculators

Calculators will be used on Module 5 assessment.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>1a. Essential Question - How can models for multiplication be used to divide?</b>				
NO.2.3.4f	Model, represent, and explain price division problems as partitive division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Jan bought 7 pies. She spent a total of \$28. If each pie cost the same amount, how much did one pie cost?	(Note: Students often use the same strategies for price problems as they use for equal group problems.) *identify the number of items bought and the total cost. Write an equation to find the price of each item. Examples: $\$28 \div 7 = n$ (One pie will cost \$4.) $\$28 \div 7 = \$4$	division price equation	Classification of Word Problems Chart
NO.2.3.4g	Model, represent, and explain price division problems as measurement division. Translate contextual situations involving division into conventional mathematical symbols. Ex. Pies cost 4 dollars each. How many pies can you buy for \$28?	(Note: Students often use the same strategies for price problems as they use for equal group problems.) *identify the cost of 1 item and the total amount to be spent. Write an equation to find how many items can be bought. Examples: $\$28 \div \$4 = n$ (7 pies can be bought with \$28.) $\$28 \div \$4 = 7$ pies	division price equation	Classification of Word Problems Chart
<b>2. Enduring Understanding - Symbolic notation is used to represent mathematical relationships.</b>				
<b>2a. Essential Question - How are symbols used to represent mathematical relationships including operations, equality, and inequality?</b>				
NO.2.3.3c	Use conventional mathematical symbols to write equations for contextual problems involving multiplication. (Price - example: Pies cost 4 dollars each. How much does 7 pies cost?)	(Note: Students often use the same strategies for price problems as they use for equal group problems.) *identify the number of items to be bought *identify the price of the item *write an equation that represents the multiplication story. Examples: $7 \times \$4 = n$ (7 pies will cost \$28.) $7 \times \$4 = \$28$	symbols price item contextual problems multiplication	Classification of Word Problems Chart / HC 284-285

Module 6 Start: 1/20/2011 Teaching Days: 14 Test: 2/9/2011 Remediation Days: 2 End: 2/11/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>3. Enduring Understanding - Organization of information shows relationships.</b>				
<b>3a. Essential Question - How can the elements of a graph help people to understand and to interpret the data?</b>				
A.7.3.1	Identify the change over time (Ex. We have recorded the morning and afternoon temperatures all week. Which day had the greatest change in temperature?)	*identify change as related to time (do not confuse with the word change that refers to money) *use given information to identify the distinction between two or more events over a period of time	time change difference compare	
<b>4. Enduring Understanding - Standard units provide common language for communicating measurements.</b>				
<b>4a. Essential Question - How are units of measure related?</b>				
M.12.3.4a	Demonstrate the relationship among different standard units: length 12 in = 1 ft 3 ft = 1 yd 36 in = 1 yd	*identify how many inches are in a foot or in a yard and the number of feet in a yard *identify the abbreviations for the standard units of measurement	foot inch yard	HC 348-349, 342-343
M.12.3.4b	Demonstrate the relationship among different standard units: capacity 2 cups = 1 pint 2 pints = 1 quart 4 quarts = 1gallon	*identify how many cups are in a pint, how many pints in a quart, and how many quarts in a gallon using materials *identify the abbreviations for the standard units of measurement	cup pint quart gallon	HC 348-349
M.12.3.4c	Demonstrate the relationship among different standard units: weight 16 ounces = 1 lb	*identify how many ounces are in a pound *identify the abbreviations for the standard units of measurement	ounce pound weight/mass	HC 348-349
M.12.3.5	Create and complete a conversion table (from larger unit to smaller unit) to show relationships between units of measurement in the same system Ex. change feet to inches using multiplication	*create a conversion table *use a conversion table *change feet to inches using multiplication *change yards to feet using multiplication *change yards to inches using multiplication *change pints to cups using multiplication *change quarts to pints using multiplication *change gallons to quarts using multiplication *change pounds to ounces using multiplication *read and use the mathematics reference sheet in Benchmark released item booklet	convert conversion table	HC 138-141

Module 6 Start: 1/20/2011 Teaching Days: 14 Test: 2/9/2011 Remediation Days: 2 End: 2/11/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - The choice of measurement tools depends on the measurable attribute and the degree of precision required.</b>				
<b>5a. Essential Question - What determines the choice of a measurement tool?</b>				
M.13.3.8	Use appropriate customary measurement tools for length, capacity, and mass.	*identify which measurement tool applies to various situations (examples: ruler, yard stick, tape measure, thermometer, scale, balance scale, teaspoons, cups, gallons, pints, quarts, pan balance) *use the appropriate tool to measure length, capacity, and mass	length capacity mass measurement tool yard stick tape measure scale balance scale	HC 338-341, 344-345, 346-347
<b>5b. Essential Question - What estimation strategies are used in measurement?</b>				
M.13.3.9a	Estimate and measure length using appropriate customary units: length in inches; perimeter in inches, feet, etc.	*determine the unit of measure to use (inches/feet/yards) and measure length/perimeter *relate a customary measurement tool to a non-standard tool (fingertip, paper clip, arm span) to help estimate length *determine the appropriate measurement tool to use (Ex. ruler, tape measure, yard stick)	estimate measure length/width perimeter customary units	HC 338-341, 444-449, 342-343 / V 9.1, 9.2, 9.15, 9.16, 9.17, 9.18, 9.19
M.13.3.9c	Estimate and measure capacity/volume and mass using appropriate customary units: capacity: cups, pints, quarts, gallons weight: pounds, ounces	*describe the order of the capacity measurement units (largest to smallest, smallest to largest) *describe the order of the weight measurement units (largest to smallest, smallest to largest) *estimate and measure capacity/volume using an appropriate measurement unit *estimate and measure weight using an appropriate measurement unit	estimate measure cups pints quarts gallons ounces pounds customary units	HC 346-347, 344-345 / V 9.9
<b>6. Enduring Understanding - Both common and decimal fractions can represent fractional parts.</b>				
<b>6a. Essential Question - How are numbers that represent fractional parts compared?</b>				
NO.1.3.7	Write a fraction that is equivalent to a given fraction with the use of models Ex. $1/2 = 4/8 = 8/16$	*use models (to ensure conceptual understanding) to show equivalent fractions (fraction circles, fraction kits, fraction towers, fraction steps, fraction bars, student-created fraction strips, etc.) *recognize and write equivalent fractions using various models	equivalent fraction	HC 522-525 / V 5.14, 5.15, 5.16

ALIGNMENT NOTES

Calculators
Calculators will be used for Module 6 assessment.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>1a. Essential Question - How can models for multiplication be used to divide?</b>				
NO.2.3.4j	Model, represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations, and multiplicative comparison and explain how a remainder may impact an answer in a real world situation.	<p>*explain how a remainder may impact an answer in a real-world situation (apply to equal group, price, and rate problems)</p> <p>*Partitive division: identify the number of groups/parts and the total number of items. Example: There are 2 shirts. There are 9 buttons in all. If each shirt gets the same number of buttons, what is the most buttons each shirt can have?  <math>9 \div 2 = n</math> (The most buttons each shirt can have is 4. There will be 1 button left over.)  <math>9 \div 2 = 4r1</math> (4 buttons)</p> <p>*Measurement division: identify the number of items in each group and the total number of items. Example: Each bicycle will hold 2 people There are 9 children. How many bicycles are needed so that everyone can be on a bike?  <math>9 \div 2 = n</math> (5 bicycles will be needed for all 9 children to be on a bicycle. On 1 bicycle there will only be 1 child.)  <math>9 \div 2 = 4r1</math> (5 bicycles)</p>	division remainder equation	Classification Of Word Problems Chart / HC 624-625
<b>2. Enduring Understanding - Relationships between numbers can be described by generalizations.</b>				
<b>2a. Essential Question - How can a pattern be generalized?</b>				
A.4.3.5	Determine the relationship between sets of numbers by selecting the rule (1 step rule in words)	*Determine the rule that explains the relationship between sets of numbers on a chart or table	rule	HC 216-217 / V 10.5

Module 7 Start: 2/14/2011 Teaching Days: 13 Test: 3/4/2011 Remediation Days: 2 End: 3/8/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>3. Enduring Understanding - Symbolic notation is used to represent mathematical relationships.</b>				
<b>3a. Essential Question - How are symbols used to represent mathematical relationships including operations, equality, and inequality?</b>				
NO.2.3.3d	Use conventional mathematical symbols to write equations for contextual problems involving multiplication. (Multiplicative Comparison - example: The giraffe in the zoo is 3 times as tall as the kangaroo. The kangaroo is 6 feet tall. How tall is the giraffe?)	(Note: Students often use the same strategies for multiplicative comparison problems as they use for equal group problems.) *identify the number of groups in the story problem *identify the number of items in each group *write an equation that represents the multiplication story. Examples: $3 \times 6 = n$ (The giraffe is 18 feet tall.) $3 \times 6 = 18$ feet	comparison symbols equations contextual problems multiplication	Classification of Word Problems Chart
<b>4. Enduring Understanding - Organization of information shows relationships.</b>				
<b>4a. Essential Question - What are some ways to organize data?</b>				
A.6.3.1	Complete a chart or table to organize given information and to understand relationships and explain the results (Ex. The library has 5 workstations. Four students can sit at each station. How many students can sit at all the stations?)	*using the information given, identify the relationship of the numbers to complete the chart or table *explain how you determined the relationship (rule)	chart table	HC 216-217 / V 10.18
<b>4b. Essential Question - How can the next step in a pattern be found?</b>				
A.4.3.4a	Use repeating numeric or geometric patterns to solve problems.	*use repeating numeric patterns to solve problems Ex. use place value to look for repeating numeric patterns on a 100s chart *use repeating geometric patterns to solve problems	repeating patterns numeric patterns geometric patterns extend	HC 180-181, 470-471, 474-477, 478-479, 480-481 / V 10.1, 10.2, 10.7
A.4.3.4b	Use growing numeric patterns to solve problems	*use growing numeric patterns to solve problems Ex. 1, 2, 4, 7, 16 4, 8, 12, 16, 20, 24 *differentiate between a repeating and a growing pattern	growing patterns numeric patterns extend	V 10.3, 10.4, 10.6
A.4.3.4c	Use growing geometric patterns to solve problems	*extend a variety of growing geometric patterns	growing patterns geometric patterns extend	HC 474-475

Module 7 Start: 2/14/2011 Teaching Days: 13 Test: 3/4/2011 Remediation Days: 2 End: 3/8/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - Perimeter is a one-dimensional measure (perimeter surrounds); area is a two-dimensional measure (area covers); volume is a three-dimensional measure (volume fills in).</b>				
<b>5a. Essential Question - What strategies can be used to find area, perimeter, and volume of a shape or region?</b>				
G.8.3.1	Compare, contrast, and build three-dimensional solids by investigating the number of faces, edges, and vertices on models	<ul style="list-style-type: none"> <li>*identify 3-D solids</li> <li>*build 3-D solid</li> <li>*show faces, edges, and vertices on 3-D models</li> <li>*count the faces, edges, and vertices on 3-D models</li> <li>*compare/contrast the faces, edges, and vertices on 3-D models</li> </ul>	faces edges vertices solids three-dimensional rectangular prism cone sphere cube cylinder properties	HC 424-427
G.11.3.1	Replicate a three-dimensional model composed of cubes when given a physical model	*provide a model built from cubes for students to replicate	3-D model replicate sides vertices faces visualization	HC 427, 452-455
M.13.3.10	Find the perimeter of a figure by measuring the length of the sides	<ul style="list-style-type: none"> <li>*identify that perimeter is the distance around a figure</li> <li>*measure a side and label the side with that measurement</li> <li>*find perimeter by adding the length of ALL the sides (even if there is an unknown side)</li> </ul>	perimeter length side	HC 444-449, 450-451 / V 9.7
M.13.3.12	Develop strategies for finding the volume (cubic units) of rectangular prisms and cubes using models	<ul style="list-style-type: none"> <li>*recognize a rectangular prism and a cube</li> <li>*contrast units, square units, and cubic units</li> <li>*use models and pictorial representations of rectangular prisms and cubes</li> <li>*develop strategies to find the volume of rectangular prisms and cubes by counting cubes that may or may not be seen</li> </ul>	rectangular prism cube cubic unit volume	HC 452-455

Module 7 Start: 2/14/2011 Teaching Days: 13 Test: 3/4/2011 Remediation Days: 2 End: 3/8/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>6. Enduring Understanding - Objects can be described and compared using geometric attributes.</b>				
<b>6a. Essential Question - How can objects be represented and compared using geometric attributes?</b>				
G.11.3.2a	Determine which new (TLI: 2-dimensional) figure will be formed by combining and subdividing models of existing figures	*identify 2-dimensional figures *combine 2-dimensional figures to make a new 2-dimensional figure *separate an existing 2-dimensional figure into parts	2-dimensional figure combine subdivide whole part visualization	HC 416-417 / V 8.3
G.11.3.2b	Determine which new (TLI: 3-dimensional) figure will be formed by combining and subdividing models of existing figures	*identify 3-dimensional figures *combine 3-dimensional figures to make a new figure *separate the faces/sides of a 3-dimensional figure	3-dimensional figure combine subdivide whole face side visualization	HC 428-429
13 SLEs				End of Module 7

## ALIGNMENT NOTES

<b>Calculators</b>
Calculators will be used on Module 7 assessment.

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>1. Enduring Understanding - Multiplication and division can be accomplished through addition and subtraction of partial products.</b>				
<b>1a. Essential Question - How can multiples be used to solve problems?</b>				
NO.3.3.5	Use estimation strategies to solve problems and judge the reasonableness of the answer	*use estimation (ex. rounding, front-end estimation, ball park estimation) to solve problems: Ex. Movies are on sale at WalMart for \$7.99 each. Fred spent about \$30 when he bought 3 movies, since \$7.99 is about \$10 and $10 \times 3 = \$30$ .) *use estimation strategies to judge the reasonableness of the answer (Is the estimate close to the actual answer? If not, what is the problem?)	estimate reasonable	HC 68-69, 88-89, 102-103
<b>2. Enduring Understanding - Multiplication and division are inverse operations.</b>				
<b>2a. Essential Question - How can models for multiplication be used to divide?</b>				
NO.2.3.4h	Model, represent, and explain multiplicative comparison division problems as partitive division. Translate contextual situations involving division into conventional mathematical symbols. Ex. The giraffe is 18 feet tall. She is 3 times as tall as the kangaroo. How tall is the kangaroo?	(Note: Students often use the same strategies for multiplicative comparison division problems as they use for equal group problems.) *identify the number of groups/parts and the total number of items. Write an equation to find the number of items in each group. Examples: $18 \div 3 = n$ (The kangaroo is 6 feet tall.) $18 \div 3 = 6$ feet	division multiplicative comparison equation	Classification of Word Problems Chart
NO.2.3.4i	Model, represent, and explain multiplicative comparison division problems as measurement division. Translate contextual situations involving division into conventional mathematical symbols. Ex. The giraffe is 18 feet tall. The kangaroo is 6 feet tall. The giraffe is how many times taller than the kangaroo?	(Note: Students often use the same strategies for multiplicative comparison problems as they use for equal group problems.) *identify the number of items in each group and the total number of items. Write an equation to find the number of groups/parts. Examples: $18 \div 6 = n$ (The giraffe is 3 times taller than the kangaroo.) $18 \div 6 = 3$ times taller	division multiplicative comparison equation	Classification of Word Problems Chart

Module 8 Start: 3/9/2011 Teaching Days: 11 Test: 4/1/2011 Remediation Days: 2 End: 4/5/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>2b. Essential Question - What strategies can be used to learn basic multiplication and division facts?</b>				
NO.3.3.3a	Develop, with and without appropriate technology, computational fluency in multiplication contextual problems (up to two-digit by one-digit numbers) using strategies for multiplying numbers, performance of multiplication in more than one way, and estimation of products in appropriate situations	*develop and use strategies for multiplying up to two-digit by one-digit numbers in contextual problems *perform multiplication in more than one way (Examples: partial products, lattice multiplication, array multiplication, invented strategies) *estimate products in appropriate situations (Ex. rounding numbers to estimate products) *solve contextual problems involving multiplication with and without appropriate technology	product estimation factor strategy	HC 158-159, 218-219, 600-601, 606-607, 608-611, AR 20-21 May include partial products, repeated addition, partitioning, compensation See V pages 113-117
NO.3.3.3b	Develop, with and without appropriate technology, computational fluency in division contextual problems (up to two-digit by one-digit number) using strategies for dividing numbers, performance of division in more than one way, estimation of quotients in appropriate situations	*develop and use strategies for dividing up to two-digit by one-digit numbers in contextual problems *perform division in more than one way (Ex. partial quotients, invented strategies) *estimate quotients in appropriate situations (Examples: using compatible numbers to estimate quotients, using multiples of 10 to estimate quotients, rounding) *solve contextual problems involving division with and without appropriate technology	quotient estimation strategy division	HC 620-623, 628-629 See V pages 121-124
<b>3. Enduring Understanding - Symbolic notation is used to represent mathematical relationships.</b>				
<b>3a. Essential Question - How are symbols used to represent mathematical relationships including operations, equality, and inequality?</b>				
A.5.3.1	Select and/or write number sentences (equations) to find the unknown in problem-solving contexts involving two-digit by one-digit multiplication using appropriate labels	*understand that an equation must have an equal sign (=) *understand that both sides of the equation must have the same value *write number sentences to match two-digit by one-digit multiplication word problems *solve for the unknown *use appropriate labels	equation number sentence balance equal sign label unknown	HC 264-265, AR 18-19 / V 10.10

Module 8 Start: 3/9/2011 Teaching Days: 11 Test: 4/1/2011 Remediation Days: 2 End: 4/5/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
A.5.3.3	Use a symbol to represent an unknown quantity in a number sentence involving contextual situations and find the value (Ex. Mary buys two bags of candy with the same number of pieces in each bag. If she has sixteen pieces in all, how many pieces of candy are in each bag? $[2 \times n = 16]$ )	*use a symbol to represent an unknown number *identify the unknown *find the value of the unknown using a mathematical strategy	symbol strategy unknown value number sentence equation	HC 186-187, 242-249
<b>4. Enduring Understanding - Probability can be represented numerically and graphically.</b>				
<b>4a. Essential Question - How is probability represented numerically?</b>				
DAP.17.3.1	Use fractions to predict probability of an event (Ex. If there were 5 blue tiles, 3 red tiles, and 2 green tiles in a bag. What is the probability you would pull out a green tile?)	*identify what probability is *relate fractions to probability as parts of a set *express probability in fraction form and word form *relate part to whole	probability fraction event outcome numerator denominator	HC AR 16-17
<b>4b. Essential Question - How is the likelihood of an event determined and communicated?</b>				
DAP.17.3.2	Conduct simple probability experiments, record the data and draw conclusions about the likelihood of possible outcomes (Ex. roll number cubes, pull tiles from a bag, spin a spinner, or determine the fairness of games)	*conduct many, various simple probability experiments (spinners, tiles, number cubes) and record the data *determine how to record data *record data during experiment (ex. tally marks) *determine the fairness of a game (playing fair and unfair games) *use data to conclude the likelihood of a possible outcome	probability fair unfair tally marks experiment data conclusion likelihood possible outcome chance most likely less likely equally likely impossible	HC 496-497, 488-489, 490-491, 492-495 / V 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8
DAP.17.3.3	Use physical models, pictures, and organized lists to find combinations of two sets of objects (Ex. Sarah has a red shirt, white shirt, and blue shirt. She also has a pair of khaki pants and blue pants. How many different combinations of shirts and pants can she wear?)	*manipulate objects to find combinations of two sets of objects *develop a strategy for organizing and finding combinations (organized list, pictures, web, table, objects, multiplication)	physical model organized list combinations	HC 498-499, 500-501

Module 8 Start: 3/9/2011 Teaching Days: 11 Test: 4/1/2011 Remediation Days: 2 End: 4/5/2011

Student Learning Expectation		Task Analysis	Vocabulary	Materials / References
<b>5. Enduring Understanding - Both common and decimal fractions can represent fractional parts.</b>				
<b>5a. Essential Question - How are numbers that represent fractional parts compared?</b>				
NO.1.3.6	Use the place value structure of the base-ten number system and be able to represent and compare decimals to hundredths in money (using models, illustrations, symbols, expanded notation and problem solving) Ex. \$193.76 ____ \$139.67	*recognize that \$1 is a whole *recognize that dollar(s) are written to the left of the decimal and parts of a dollar (coins) are written to the right of the decimal *recognize that the decimal point separates the whole (dollars) from the parts (coins) and is read as "and" *recognize that a dime is 1/10 of a dollar and a penny is 1/100 of a dollar *recognize the value of the tenths place *recognize the value of the hundredths place *compare the whole number, then the tenths, and then the hundredths *compare two money amounts using <, >, = *write a money amount in expanded notation	decimal point dollar sign place value hundreds tens ones tenths hundredths expanded notation whole part dollars coins compare	HC 578-579
11 SLEs				End of Module 8

## ALIGNMENT NOTES

Calculators
Calculators will be used on Module 8 assessment.

# Grade 3 Standards Not Yet Requested for Testing

BRYANT SCHOOL DISTRICT

## Numbers and Operations(NO)

NO.3.3.2a	Develop, with and without appropriate technology, fluency with basic number combinations for multiplication facts (10 x 10)
NO.3.3.2b	Develop, with and without appropriate technology, fluency with basic number combinations for division facts
NO.3.3.3c	Develop, with and without appropriate technology, computational fluency in multiplication and division contextual problems (up to two-digit by one-digit numbers) using relationships between operations
NO.3.3.4	Solve simple problems using one operation involving addition and subtraction using a variety of methods and tools (Ex. Objects, mental computation, paper and pencil and with and without appropriate technology)

## Measurement (M)

M.12.3.1	Determine the number of days in a month, days in a year and identify the number of weeks in a year
M.12.3.2a	Recognize that 60 minutes equals 1 hour
M.12.3.2b	Recognize that a day is divided into A.M. and P.M.
M.12.3.3	Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer (Ex. If I need to wear mittens and a scarf, what temperature would it be? 35° F or 70° F?)
M.13.3.5	Determine the value of money up to \$10
M.13.3.9b	Estimate and measure area using appropriate customary units: square inches (use models)

## Data Analysis and Probability(DAP)

DAP.14.3.1a	Design a survey question after being given a topic
DAP.15.3.2	Match a set of data with a graphical representation of the data